

U.S. ARMY CORPS OF ENGINEERS

REGIONAL LISTENING SESSION MEETING NOTES

HONOLULU, HAWAII
JULY 26, 2000

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July 2000

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by

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REGIONAL LISTENING SESSIONS MEETING NOTES – HONOLULU, HAWAII

The notes provided below document the main points that were offered during the Listening Session in Honolulu, Hawaii on July 26, 2000. The notes highlight and summarize the key topics and issues that were discussed at the meeting. Selected attachments are provided in this document.

Water plays a major role in how we live and work. As steward of America's water resources for more than 200 years, the U.S. Army Corps of Engineers has begun a dialogue with the American public, stakeholders, customers, and government agencies at all levels about the water resources challenges that lie ahead. The Corps is conducting 14 regional public listening sessions throughout the United States between June and November of 2000 to provide citizens the opportunity to voice concerns about pressing water resources problems, opportunities, and needs impacting their lives, communities, and future sustainability. This dialogue is an integral part of the Corps's strategic planning process.

The cities where listening sessions are being conducted include St. Louis, MO, Sacramento, CA, Phoenix, AZ, Woburn, MA, Atlanta, GA, Omaha, NE, Honolulu, HI, Chicago, IL, Louisville, KY, Dallas, TX, Williamsburg, VA, New Brunswick, NJ, Anchorage, AK, and Vancouver, WA.

This report summarizes the Honolulu, Hawaii, listening session. This session, hosted by the Pacific Ocean Division, was conducted on July 26, 2000 at the Ala Moana Hotel in Honolulu. Approximately 33 people attended this meeting to share their views with the Corps.

The information collected from the listening sessions will be incorporated into a report assessing future national water resources needs and the gaps that must be closed to meet these needs. This report will be shared with key decision-makers within the Army and Congress to help inform their discussions about water resources issues and future investment decisions. Additionally, the report will provide a point of departure for ensuing discussions with other Federal agencies to identify common water resources issues and missions most appropriate to the roles and responsibilities of the Federal government. The information will also be incorporated into a revision of the Civil Works Program Strategic Plan.

Welcoming Remarks

Brigadier General Randall Castro, USACE Pacific Ocean Division Commander, welcomed the audience to the meeting. He explained to the participants that the POD was responsible for waterway construction management, along with other duties. The division consists of four districts: Far East District, Japan District, Alaska District, and Hawaii/Pacific Island District. He continued by saying this division averages \$1.5 billion in revenue each year. General Castro explained to the participants that the Corps follows a philosophy based on

leadership, where the Corps conducts communication, informs people on Corps projects, and provides the resources and services needed to support the Nation (referred to as TIPS). General Castro asked the participants to be sensitive to the needs of other participants attending the session. He explained that the Corps was conducting the sessions in order to listen to the wants and needs of the participants. The session was designed to address national and regional water resource challenges and was important to the Corps. He acknowledged some Council representatives were present and assumed they felt the session was important. He also felt the session was important since it gave an opportunity for the Corps to listen to the needs of the public. He continued by saying that water resource use was an important issue for the entire Nation and needed to be addressed. Since water resource use was a national issue, additional sessions were being conducted in all eight regions. General Castro stressed the sessions required a balance and team atmosphere. He realized the participants needed a balance between their job, family, and additional daily issues. In the same vein, the Corps needed a balance between growth of the Nation, and coordination between agencies (i.e. teamwork). General Castro felt the first step in teamwork was to listen. The Corps' responsibility was to listen and assess the challenges being presented and discussed.

General Castro explained that the Corps initially identified six general water resource challenges facing the Nation. He stressed these six challenges were only starting points in determining the water resource challenges that the region may face and realized other challenges may exist. He explained the Corps wants to progress to a point where positive, advanced development can be achieved. This is possible by the participants sharing with the Corps the challenges their region faces.

The General closed by noting that all of the information gathered in Honolulu and elsewhere will be compiled in a report which will be posted on the Corps' "national challenges" website at <http://www.wrsc.usace.army.mil/iwr/waterchallenges>. Once all the sessions were complete, a national water resource challenge report would be developed for decision-makers of the Nation to determine the needs of the future. He reiterated the Corps was providing the session to listen to the people of the Nation. General Castro admitted he was very excited to participate in the session and was anxious to hear what the other participants had to say.

General Castro then introduced Mr. Jim Creighton as the session facilitator representing the contractor, Planning and Management Consultants, Ltd. Lastly, General Castro thanked everyone for coming and helping and felt their involvement would assist in the development a better Nation.

Session Objectives

After General Castro's introduction, Mr. Creighton, began by explaining the format of the workshop and his role as a professional facilitator. He stressed that it was his responsibility to encourage every participant to speak during the session. Mr. Creighton explained that the listening sessions were designed to get input from everyone. He explained that the goal of the meeting was to obtain the answers to the following four questions:

1. What are the key water resource challenges facing this region?
2. Why is it a problem, and what will be the impact?
3. What actions should be taken to respond to the challenge?
4. Who should take these actions? What should the Federal government do to address the problem?

Mr. Creighton introduced the session recorder for the session and said he would be summarizing and presenting the proceedings in a report. He asked participants to provide any written statements to the session recorder for inclusion in the report. Also, Mr. Creighton noted that if a participant wanted to provide a written statement but did not bring one to the workshop, it would be possible to send such a statement as an e-mail attachment to the above-referenced Corps website. Once the session report was completed, it would be provided to the registered participants and additional session reports would be available on the Corps website. Mr. Creighton also explained that the purpose of these listening sessions was not to discuss specific Corps projects, and that if an audience member had concerns about a particular project, they were to speak with Mr. Larry Hawthorne, Personal Affairs Officer (PAO) from the Corps, who was present at the workshop. He then briefly outlined the proposed agenda of the current workshop for the audience. Although the agenda was intended to serve as a general guide to the day's activities, the agenda could be modified at the facilitator's discretion as appropriate for the particular audience. The agenda was presented as follows:

1:00-1:10	Welcome
1:10-1:20	Overview of Workshop
1:20-2:20	Table Talk Discussions
2:20-3:25	Large Group Discussions (Plenary)
3:25-3:30	Dot Voting
3:30-3:45	Break
3:45-4:45	Small Group Refocus
4:45-5:20	Large Group Discussions (Plenary)
5:20-5:30	Closing Remarks
5:30-6:00	Informal Discussions

The first task assigned to the audience was to name a group spokesperson for each table. That person would be designated to report on behalf of the entire table. Mr. Creighton went on to explain that at least one member of the Corps would be sitting at each table to listen to the discussions and assist the group if asked, but that they had been instructed not to serve as the spokesperson for the table.

Once the spokespersons had been chosen, two directions would be presented to the audience for them to discuss in small groups at the tables. The first direction would be to identify the water challenges that people at the table thought were important; the second direction would be to discuss why they were important. The spokesperson for each table was also instructed to create a crisp, concise six or seven word statement of each challenge as identified by the group, as well as develop a brief analysis as to why it was considered a challenge. As each spokesperson reported on the challenges generated at their table, a Corps staff member would capture a concise statement of each challenge and project it onto a screen for

all to view. Another Corps member would write out the same statement on butcher pad paper and post it for prioritizing the challenges. Once all challenges were determined, the participants would be given five red self-adhesive dots. The dots would be used to vote on the challenges each participant felt were the most important. The reason for this was so that the most important challenges could be addressed during the following session. The other challenges would be analyzed and discussed in the summary report, but because of time constraints, could not be discussed in the session. He explained to everyone that self-adhesive challenge “stickies” could be used for listing additional comments on an individual basis and to post them on the challenges taped up around the room.

Finally, Mr. Creighton urged the audience members to follow and trust the process, as it was carefully designed to gather the most information from each participant. He recommended people with the same agenda to sit at different tables so to voice their views to participants unfamiliar with the information they wanted to share. Most of the day’s activities would involve working in small groups in order to achieve the maximum interaction among the participants. Following these instructions, the participants were then asked to introduce themselves to the other participants at their table, assign a spokesperson for the table group, independently write down the challenges each felt the Nation faced, and then go around the table group and discuss the challenges.

Identification and Validation of Water Resource Challenges (1st Group Discussion)

The participants were grouped into eight tables of approximately five to eight people per table. After approximately an hour of discussion, Mr. Creighton went around the room and asked the spokesperson from each table to give a concise statement of the challenge or challenges identified by the participants at the table. While one member of the Corps staff projected onto a screen each challenge as it was identified, other Corps staff wrote each challenge on a separate piece of butcher paper, each of which were then affixed to a wall of the conference room. The workshop participants identified thirty-seven separate challenges:

- A. Old abandoned pipelines leaking petroleum.
- B. Aging marine transportation structure (docks, piers, moorings).
- C. Coastal erosion - Protecting Hawaii coastlines from erosion (solutions other than concrete).
- D. Increased runoff due to development (forest to hard surface) both quantity and quality.
- E. Drinking water supply for Pacific Islands.
- F. Using a systems approach for water quality for both inland and ocean.

- G. Policy standards with federal regulations should recognize setting of islands - ecological and cultural.
- H. Integrated watershed management using island model.
- I. Forum for all stakeholders to participate in water management and funding.
- J. Lack of integrated land use planning - impact of increased urbanization.
- K. Unfunded mandates for implementation.
- L. Implementation of projects has been based on historical needs, need to be able to design for future (not the past).
- M. Flood control and flood management - stream management, capacity, channelizing.
- N. Restoring streams that were channelized.
- O. Insuring that water supply be maintained for agriculture - consistent supply and affordable.
- P. Use of dual water systems.
- Q. Do projects (planning to construction) faster - use competitive process so that Corps isn't only body doing work.
- R. Maintenance of navigation channels depths and widths - improve safety and efficiency - streamline permitting process.
- S. Improved and cost effective ground water remediation treatment process.
- T. Use pricing as an incentive for conservation flood management - cost should reflect actual value of water.
- U. Responsible management of hazardous materials - consider economic and social impacts as well.
- V. More consciously integrate traditional knowledge of previous history of how water was used and impacts.
- W. Emergency response.
 - 1. Insuring adequate water supply.
 - 2. Preventative management approach = identifying aging structure - clearing streams.
- X. Getting adequate representation from environmental and public issues into projects/studies - getting creative solutions.

- Y. Systematic and complete inventory of all surface water and groundwater for all uses.
- Z. Proactive approach to harbor and navigable waterways issues.
- AA. Include aesthetics as components to designs.
- BB. Provide safe and adequate passengers terminals, harbor and ports for cruise industry.
- CC. Recast terminology that puts negative connotations on wastewater, storm water, etc.
- DD. Wastewater management - increased volumes of waste - find alternative technologies other than traditional practices.
- EE. Aging wastewater treatment centers are wearing out and funding is gone to update.
- FF. Need for a standardized and quantified way - link values with water resource functions - deciding how to prioritize.
- GG. Assess human impacts of water resources practices.
- HH. Mechanism for having community value drive priorities.
- II. Greater consideration of natural processes in project design.
- JJ. System approach to planning projects - use multiobjective approach.
- KK. Provide training and technical support for Pacific Island communities for water and wastewater systems.

After the last challenge was identified, Mr. Creighton thanked the group and advised the audience that at any time during the day they were welcome to fill out the “stickies” for any challenge of personal interest and stick it on the appropriate banner for that challenge, for as many challenges as they wished. A transcription of the comments written on the “stickies” is provided in Appendix A.¹

Mr. Creighton then explained to the group that each challenge identified by the audience was important to the Corps and would be included in the meeting report. However, due to time constraints, only six challenges would be addressed in detail during the second portion of the session.

Next, all of the participants were asked to vote on all of the challenges using adhesive dots in order to identify which challenges were of most concern to the group in general. Sheets of adhesive dots were placed on each table. Each non-Corps workshop participant then took five dots and affixed them beside the challenge or challenges of most interest to him or her. The five dots could be distributed in any way the individual saw fit, such as one dot per challenge or all

¹ The authors of this report made every effort to accurately transcribe the handwritten comments from the “stickies” generated by the listening session participants; however, some comments may contain errors due to illegibility or incoherence of the original text.

five dots on a single challenge. The number of dots for each challenge was then tallied and the totals written on each challenge sheet. The dots beside each lettered challenge were distributed as follows:

A	6	N	6	AA	2
B	10	O	6	BB	0
C	13	P	10	CC	0
D	6	Q	3	DD	3
E	3	R	1	EE	3
F	9	S	5	FF	5
G	12	T	2	GG	0
H	16	U	1	HH	0
I	4	V	4	II	0
J	0	W	4	JJ	1
K	1	X	3	KK	1
L	3	Y	2		
M	19	Z	0		

During the break period, Mr. Creighton combined similar challenges and gave them a general theme heading. Once the group reconvened, Mr. Creighton discussed each combination and asked for any objections from the group participants. No disapproval was voiced on the combinations. Additionally, the participants were asked if they saw any other challenges that were similar. Some participants felt challenges A and S should be combined and no objection was given. With that in mind, the challenges combinations were as follows:

- P, DD, and EE
- C and Q
- F, G, H, J, and V
- B, L, R, Z, and BB
- A and S

After the combining of challenges, the six challenges (or challenge combinations) with the most dots were selected for additional discussion. The six challenges most favored by the audience were:

F, G, H, J, V	(41 votes)	Integrated planning/adapt to Hawaii
M	(19)	Flood control and flood management
P, DD, EE	(16)	Wastewater
C, Q	(16)	Coastal erosion
B, L, R, Z, BB	(14)	Marine transportation
A, S	(11)	Groundwater treatment/remediation

Responsibilities and Actions Needed to Meet the Challenges (2nd Group Discussion)

After the participants returned from the break, Mr. Creighton explained the format for the remainder of the afternoon. Approximately 30 to 35 non-Corps participants were counted after the lunch break. The six main challenges were written on butcher pads positioned around the room (one challenge/combination per butcher pad). A one hour discussion period would be designated to allow for the challenges to be examined and for solutions to be developed. The participants would have the opportunity to discuss in detail one of the challenges that interested them by sitting at the table next to the appropriate butcher pad. In the event they wanted to participate in a different challenge discussion, they were free to switch from one challenge to another during the discussion period. The facilitator asked for one volunteer to remain next to each butcher pad throughout the discussion and serve as the moderator and spokesperson for that discussion. This person would record the participant's ideas and suggestions for that challenge on the butcher pad.

Before commencing, some questions were posed to the group, and the participants were asked to develop the answers to these questions during their discussions. The answers would then be reported out to the entire audience at the end of the second discussion session. The questions were:

Assume you have the authority to implement the changes you would like to see. Discuss within your group:

- a. What actions would you take?
- b. Who should do it?
 - i. Role of the federal government
 - ii. Role of the State or local governments
 - iii. Role of private individuals or organizations

Audience members then gravitated into groups around several of the butcher pads (one challenge/combination per butcher pad) and began deliberating with others in their group. A volunteer notetaker at each group took notes on the butcher pads for each of the six chosen challenges. The discussion session went from approximately 4:00 to 5:00. At the end of the discussion, Mr. Creighton asked the spokesperson for each challenge to restate the challenge, provide a summary of the discussion and the answers to the questions. The results of the discussions on the challenges are provided below²:

Challenge F, G, H, J, V – Integrated Planning/Adapt to Hawaii

The group felt looking at the issue in a watershed sense was not representative enough, but rather wanted to view the issue as a water resource management issue. The area of concern

² The challenges are listed in the order of priority from the dot voting in the first group discussion, rather than in actual order of presentation.

was needed to extend “from the sea soil to the mountain side or top.” This means the model would need to extend to the deep ocean.

What Action Should be Taken?

- Authority (defined as “By the People.”).
- Host and community values need level of consideration and consensus is required.
- Inventory of community assets from GIS maps and local public input.
- Adaptive management strategies that enhance communication.
- Need mechanism to allow for community participation (i.e. multimedia).
- Empower shared responsibility.

Who Should Take Action?

- Federal, State, County, and other government agencies.
- Community groups.
- Private Industries.

Challenge M – Flood Control and Flood Management

What Action Should be Taken?

- Define flood control/management.
- Redesign the debris basins.
- Implement greenbelts/forest in to future flood prevention plans and use for recreation areas.
- Conduct new studies to obtain more accurate FEMA maps.
- Use a logical process for planning, designing, and constructing flood works.
- Integrate sediment basins into drainage plans.
- Address runoff issues in west Maui community.
- Neighborhood ownership enforcement.
- Redesign bridges and culverts.
- Improve maintenance and cleaning programs.
- Need to integrate flood control in water quality management.
- Need to integrate habitat values in stream management.
- Design structures to be easily maintained.
- Reconfigure existing structures to improve natural functions (i.e. low-flow channels).
- Include water quality requirements in County Drainage Ordinances.

Who Should Take Action?

- Mostly County action, but also some Federal and State assistance.
- Some private industry.

Challenge P, DD, EE – Wastewater

What Action Should be Taken?

- Redefine drinking water and wastewater into one term, “water.”
 - Reorganize federal, state, and local agencies.
 - Simplify and unify regulations.
- Reauthorization of funding under CWA for construction grants (OMR).
- Need correct assessment of operation and maintenance costs.
- Need to use all water types
- Promote education (public/professional groups) on the purpose and needs for water reuse utilizing the latest technology.
- Create in Hawaii an independent research center for water resources of the Pacific Rim.
- Mandate water recycling in ways that protect human health and the environment (dual systems).

Who Should Take Action?

- Federal and State.

Challenge C, Q – Coastal Erosion

What Action Should be Taken?

- Need to move developed areas (i.e. communities) away from coast to decrease coastal hazards.
- Determine erosion hazard areas and erosion rates.
- Implement beach nourishment.
- Educate community and get public input.
- Increase funding and enhance laws to provide additional funding for recreational benefits.
- Designate U.S. beaches as “National Jewel” through National Beach Service (NBS).
- Stop insuring coastal hazard areas; have a buy-out program.
- Speed up project development/implementation.
- Develop a local Coastal Service Center.
- Modify local land use policies, with relocation of people in high-risk areas.
- Provide funding through municipal tax districts, hotel tax (volunteer based/revenue based).
- Need coastal agency for beach improvements.
- Develop more efficient coordination between agencies.

Who Should Take Action?

- Federal and State government
- Individuals.
- Non-governmental Organizations.

Challenge B, L, R, Z, BB – Marine Transportation

What Action Should be Taken?

- Execute strategic harbor plans, which already exist.
- Integrate Federal mandates with strategic harbor planning.
- Obtain funding in order to execute plans.
- Streamline permit process for harbor/port issues (with respect to construction).
- Shorten plan and design process for civil works water projects by USACE.

Who Should Take Action?

- Federal agencies
 - USACE.
 - Federal Highways Administration.
 - U.S. Coast Guard
- State agencies.
- Private Industry.

Challenge A, S – Groundwater Treatment/Remediation

What Action Should be Taken?

- Field assess existing pipeline problem areas and inventory tank locations.
- Extend investigation to non-point sources, especially agricultural uses of chemicals.
- Determine what chemicals are in soil profile and identify source/location of pollution, then determine clean-up method.
- Integrate groundwater in to watershed studies.
- Need to properly inventory non-military and private lands in coordinated manner.
- Find creative uses for partially contaminated water in non-sensitive areas and monitor impacts.
- Identify funding.
- Increase the observation of near shore areas influenced by tidal movement.

Who Should Take Action?

- Multi-level task force that consists of heavy State involvement.
- Clean up provided by public and private groups/organizations.

Closing Remarks and Adjournment

As a final order of business, Mr. Creighton reminded the participants to register if they were interested in receiving a copy of the report or said they could view it on the Corps website. Additionally, he asked the participants to fill out comment sheets if they had not already done so

and leave them with the Corps staff.³ Lastly, he reminded the participants to write down any additional remarks or challenges on the stickies and to post them before departing.

In closing, General Castro thanked everyone for their involvement and asked the group to give each other a round of applause. He asked the participants the question, “where do solutions come from?” He answered by telling the participants it comes partly from the listening sessions such as this one. General Castro continued by letting the participants know that he felt very lucky for being able to attend the session and listening to the challenges Hawaii faced. He admitted recent needs had been discussed that were not being addressed. Legislation was in the works for more insular needs of federal funding. He stressed that Hawaii would benefit from these particular issues in the funding process. General Castro added that funding would be allocated, in part, from sessions such as this. He figured some progress would be apparent in approximately one year. The current objective of the Corps was to listen to the challenges facing the Nation and determine the regional needs in respect to the Nation. He reminded the participants that State representatives were also present to listen to the local needs. Lastly, General Castro thanked everyone for being a part of the team and urged everyone to keep their passion bright and to work hard in solving the variety of water resource challenges we all face. The workshop was then adjourned. The public statements collected in conjunction with this listening session are included as Appendix B.

³ In order to obtain feedback for internal use by the Corps on the effectiveness of the listening sessions, Corps personnel placed comment forms on each table for the participants to complete. These were collected by the Corps personnel as the participants left the meeting.

APPENDIX A

TRANSCRIPTION OF COMMENTS REGARDING IDENTIFIED CHALLENGES

COMMENTS ON “STICKIES” COLLECTED AT HONOLULU LISTENING SESSION [The challenges listed in this table correspond to the challenges identified in the meeting]		
ID#	Challenge	Why challenge is important?
Challenge A		
Old abandoned pipelines leaking petroleum.		
1	Abandoned pipelines left over from WWII.	Many of these pipelines contain oil and periodically leak onto the ground or in the water.
Challenge B		
Aging marine transportation structure (docks, piers, moorings).		
2	Size of port infrastructure.	Container ships are getting larger some can carry 6000 TEV. If the port infrastructure (including harbor draft) is too small the island will not be able to accommodate these ships.
3	Aging marine transportation infrastructure-piers, docks, moorings.	<ol style="list-style-type: none"> 1. Effect efficiency of the port. 2. Can pose a safety hazard. 3. Unable to keep up with the growth of the marine transportation. 4. Can pose an environmental problem.
Challenge C		
Coastal erosion-Protecting Hawaii coast lines from erosion (solutions other than concrete).		
4	Restore shoreline/beach resources degraded and destroyed by past actions.	Shoreline/beaches are important habitats for rare/endangered marine dependent organisms, beaches buffer storm waves, are integral to our culture and tourism economy.
5	Coastal Erosion- Coastal Hardening	<ol style="list-style-type: none"> 1. Impacts to marine resources & coastal use. 2. Economic case for state.
6	Coastal Erosion- better manage the coastline and feed backs to compatible with beach resources. (avoid coastal hardening 1 sea walls) promote sand nourishment & dune management.	Maintain beach resources.
7	Maintaining ocean recreational water quality in the face of increasing tourist use, shipping, urban runoff.	Ocean quality critical to our quality of life, economic well being through tourism.
Challenge D		
Increased runoff due to development (forest to hard surface) both quantity and quality.		
8	Improve storm drainage systems to better exclude litter, debris, and oil run off from entering our waterways.	

COMMENTS ON “STICKIES” COLLECTED AT HONOLULU LISTENING SESSION [The challenges listed in this table correspond to the challenges identified in the meeting]		
ID#	Challenge	Why challenge is important?
9	Increased runoff is resulting from development-ag & urban- in the middle and upper watershed areas.	1. Drainage & flood structures are unable to handle extra flow. 2. Water quality problems increase in the receiving areas due to increased erosion and reduced detention.
Challenge E		
Drinking water supply for Pacific Islands.		
10	Over pumping of the Pearl Harbor aquifer.	Drinking water quality deterioration.
11	Insufficient water supply for growing populations in Pacific Islands.	Water is life. Generally some growth is needed to avoid economic stagnation.
12	Drinking water/water quality – irregular.	
Challenge F		
Using a systems approach for water quality for both inland and ocean.		
Challenge G		
Policy standards with federal regulations should recognize setting of islands -ecological and cultural.		
13	The hydrogeomorphology of our volcanic islands is unique. Solutions that work in other jurisdictions can be disastrous here.	We may be wasting our time and money on worthless solutions that can permanently alter our fragile ecosystems.
14	Indigenous Pacific Islands depend on natural sources of water for traditional and customary practices that maintain their cultural heritage. Western/engineering solutions often violate traditional uses.	The unique character and quality of life here in Hawaii depends on maintaining the integrity of our host culture.
Challenge H		
Integrated watershed management using island model.		
15	Need water strategy to dredge water supply in light of increased demands and drought conditions.	Water needed to sustain life and maintain balance between water user.
16	Will and is there adequate supply and quality of water for all users! Environmental/human impacts on watersheds.	Affects economic/social/environmental aspects of Hawaii – can lead to chaos/disruptive committees.
17	Stream and fresh water quality – things just keep getting worse, or is our perception of "bad" different today?	Health of our crops, our children. Sentimental desire to see my children swim and go mud sliding like I did.

COMMENTS ON “STICKIES” COLLECTED AT HONOLULU LISTENING SESSION [The challenges listed in this table correspond to the challenges identified in the meeting]		
ID#	Challenge	Why challenge is important?
18	Provide environmental and economic sustainability for each island watershed and its resources – protecting the water and its uses that flow from the mountain to the coral reef.	Lack of integrated government and community coordination is education, planning and communication. Provides integrated environmental and resource management practices resulting in potable water, flood control.
19	Conserving, preserving, and restoring water quality for drinking, agriculture, and recreational use.	Human interaction/impact has been detrimental, and cumulative impacts will only management without active management / water resources are finite.
Challenge I		
Forum for all stakeholders to participate in water management and funding.		
20		Integration of all stakeholders in coordinated management of the watershed.
Challenge J		
Lack of integrated land use planning-impact of increased urbanization.		
21	How to not destroy native ecosystems on islands, specially Oahu where land is getting scarce.	Wetlands, and the plants and animals which live in them, need to be preserved, especially in an island environment like Hawaii where ecosystems are fragile.
22	Enforcement for building codes and standards following disaster.	After hurricanes IWA and INIKI home that were rebuilt were done so with grand fathered codes and standards.
23	History of impacts to land is being lost every day, and I'm concerned that the people who buy land or acquire land don't know that they are getting – especially as the military disposes of its property.	We need to know what restrictions there may be with certain land uses, for example: 1. changes from agricultural to residential use – are residual pesticides safe for families? 2. Revitalizing or redeveloping former industrial and military properties – is change in land use appropriate?
24	Development in sensitive water-related areas – wetlands, stream corridor floodplains.	1. Loss of wetland and stream functions. 2. New development put "at risk."
25	Water resources and development on our island state – when will we wake up to our disappearing water supply? Lack of centralized planning functions, role of money, politics.	
26	To implement long-range ecosystem and other values for land use and community planning.	Maintain environmental atmosphere and compatibility with nature.

COMMENTS ON “STICKIES” COLLECTED AT HONOLULU LISTENING SESSION [The challenges listed in this table correspond to the challenges identified in the meeting]		
ID#	Challenge	Why challenge is important?
Challenge K		
Unfunded mandates for implementation.		
Challenge L		
Implementation of projects has been based on historical needs, need to be able to design for future (not the past).		
Challenge M		
Flood control and flood management-stream management, capacity, channelizing.		
27	Flood control.	Mitigation, recurrences, team effort (pvt/public partnerships).
Challenge N		
Restoring streams that were channelized.		
28	Restoration of man-modified streams to be more compatible with environment. De-channelize streams – promote green scaping – vegetated stream banks.	Improve nearshore waters. In?? infiltration. Improve environment for native habitat.
29	Maintenance of the watershed.	Adequate quantities of potable are mandatory to support the population. Damage to the watershed potentially reduces the amount f water that refreshes the aquifer.
30	Soil loss/erosion from stream channel modifications or lack of stream channel maintenance.	1. Soil loss 2. Sediment to reefs. 3. Long-term environmental damage.
31	Cleaning and maintenance of flood/water control channels and streams.	Recent dry weather and few severe rainfall events plus tight budget result in lax cleaning/maintenance programs. Growth and debris are major contributors to damages caused by flooding.
Challenge O		
Insuring that water supply be maintained for agriculture-consistent supply and affordable.		
32	Availability of consistent and affordable water for agriculture.	Changes in ag activity in the state have thrown "traditional" ag water supplies and delivery systems "up for grab." Money and effort are needed to do the planning and system repair.
33	Maintaining adequate water supplies for Oahu to meet growing demand.	Adequate fresh water necessary for maintaining standard of living.

COMMENTS ON “STICKIES” COLLECTED AT HONOLULU LISTENING SESSION [The challenges listed in this table correspond to the challenges identified in the meeting]		
ID#	Challenge	Why challenge is important?
Challenge P		
Use of dual water systems.		
34	Identify, classify and popularize the use of non-potable (e.g., recycled) water for irrigation, industrial and non-drinking purposes.	Sources of potable water are near the limits of sustainable yield.
Challenge Q		
Do projects (planning to construction) faster-use competitive process so that Corps isn't only body doing work.		
35	Timing projects.	People die.
Challenge R		
Maintenance of navigation channels depths and widths -improve safety and efficiency-streamline permitting process.		
36	Navigation projects.	
37	Addressing adequate and safe shipping/commercial inland navigable waterway and port user needs in anticipation and in advance of the growth demands.	Ports and waterways safety.
38	Removal of wrecks and obstructions in navigation channels.	1. Major impact of vessel navigation safety. 2. Major effect in local economy. 3. Impact of vessel movements.
39	Develop adequate commercial harbor facilities including entrance channels, turning basins, breakwaters, piers and shore side facilities.	Water borne commerce is very important to the economic well being of island communities.
40	Maintenance of navigation channels depths and width.	1. Navigation safety hazard. 2. Inefficiency to marine transportation. 3. Limits growth of marine transportation.
41	Dredging is necessary for port operations and must be allowed without overly burdensome permit conditions.	Harbors without adequate water depth are not fully functional and are thus not able to fully contribute to the economy.

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ID#	Challenge	Why challenge is important?
Challenge S		
Improved and cost effective ground water remediation treatment process.		
42	Cost effective remediation of resources especially groundwater/soils. Need balance between environment and economy. Integrate risk assessment/economics/new science.	"We have to live with waste."
43	Alternative water resource (water reuse). Clean, economically feasible water.	Obvious!
44	Reclaimed water use effects on human health Reclaimed water use effects on environment.	All water is recycled and yet it has to be adequately cleaned up.
45	Protecting groundwater supplies from contamination resulting from increasing development.	Contaminated water supplies cause public health problems and are expensive to clean up.
Challenge T		
Using pricing as an incentive for conservation flood management-cost should reflect actual value of water.		
Challenge U		
Responsible management of hazardous materials-consider economic and social impacts as well.		
46	Recycling of dredged material.	Dredged material represents soil loss. Very costly to dredge. Waste of resource to dump at sea – even though disposal offshore may not be environmentally deleterious. Too costly to dispose on land. Therefore a problem!
47	Responsible management of hazardous materials.	Policies such as POL mitigation need to be reasonable and consider the issues such as economic cost or social impact.
Challenge V		
More consciously integrate traditional knowledge of previous history of how water was used and impacts.		
48	Water conservation, environmental awareness/community education/involvement.	Need more public participation through educated input.

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ID#	Challenge	Why challenge is important?
Challenge W		
Emergency response.		
1. Insuring adequate water supply.		
2. Preventative management approach = identifying aging structure – clearing streams.		
49	Emergency Management/DS Response	Mitigation, rising costs, communities that have "habitual" flooding.
Challenge X		
Getting adequate representation from environmental and public issues into projects/studies-getting creative solutions.		
50	Public participation in environmental decisions is nearly non-existent – need more involvement and consideration of community concerns.	We need to make sure our decisions represent all our people, not just those who are able to seek out opportunities to comment.
Challenge Y		
Systematic and complete inventory of all water surface and groundwater for all uses.		
51	Need for systematic and complete inventory of all ground and surface waters for potable and non potable uses. Groundwater – identify sustainable yields and water rights in various areas to increase water extraction efficiency.	We maintain potable water supply.
52	Dealing working with existing hydrologic and hydraulic analyses of riverine flood areas which do not occur as depicted on existing flood insurance rate maps (firms). Many areas need restudy.	Limits the ability to develop areas which may not be prone to floods as shown on firms while underestimating the flood potential in adjacent areas.
53	Lack of data/information.	
Challenge Z		
Proactive approach to harbor and navigable water ways issues.		
54	Constraints of harbors to the MTS.	Flow of commerce, safety, economic growth.

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ID#	Challenge	Why challenge is important?
Challenge AA		
Include aesthetics as components to designs.		
55	Balance between engineering and aesthetics especially in flood control projects.	<ol style="list-style-type: none"> 1. Growth and development within communities are near natural drainways with flooding potential if drainways are not functions. Concrete channels may achieve engineering goals but not aesthetical. 2. On Maui, as with rest of the state, tourism is the economic driver. Tourists are interested in more than sand and surf and sun. The "look" of a place has an important role in visitor satisfaction.
Challenge BB		
Provide safe and adequate passengers terminals, harbor and ports for cruise industry.		
56	Safe and secure passenger terminals.	The cruise ship industry will expand significantly. Passengers and tourist must feel secure or the industry will not grow.
Challenge CC		
Recast terminology that puts a negative connotations on wastewater, storm water...		
57	Water classification – acceptability and public awareness of use of water for non-potable use.	
Challenge DD		
Wastewater management-increased volumes of waste-find alternative technologies other than traditional practices.		
58	Environmental impacts of sewage treatment/disposal.	Impacts affect environment (flora/fauna) and human health.
Challenge EE		
Aging waste water treatment centers are wearing out and funding is gone to update.		
Challenge FF		
Need for a standardized and quantified way-link values with water resources functions - deciding how to prioritize.		
59	Resolve the "perceived" dichotomy between our "environment" and our "economy."	
60	Need for a standardized, quantitative, and objective way to assess functions of water resources (and values of those functions) so that we can start to prioritize where money and effort are directed toward	

COMMENTS ON “STICKIES” COLLECTED AT HONOLULU LISTENING SESSION [The challenges listed in this table correspond to the challenges identified in the meeting]		
ID#	Challenge	Why challenge is important?
61	Establishing water management (and economic development) policies that are flexible enough to accommodate change/variability in water (e.g., climate-related changes in rainfall) and rainfall is the source of water for many/most Pac isles.	Cause climate <u>is</u> variable.
62	Establishing water management (and economic development policies) that are anticipatory (proactive) requires continuous dialogue and interaction.	Helps support long-term planning as well as dealing with near-term (today's) problems.
63	Conflicting demands of waterway users.	Balance needs of economy vs. historical use.
Challenge GG		
Assess human impacts of water resources practices.		
64	Consider the impact of agricultural runoff and seepage on the fragile coral reef resources and if deemed a legitimate concern, move towards addressing a solution.	
65	Insufficient water supply for growing population.	Water is life, economics.
66	Contamination of ground water resources – from agricultural pesticides and termite treatment.	No water!
Challenge HH		
Mechanism for having community value drive priorities.		
67	Fresh water resource allocation must be based on the need of the community and the people.	Water allocation policy affected by special interest groups.
Challenge II		
Greater consideration of natural processes in project design.		
68	Using beach nourishment as a viable means of protection infrastructure built along coastlines.	<ol style="list-style-type: none"> 1. Beaches provide protection from storms/waves of infrastructure roads, buildings, etc. 2. Beaches provide recreational benefits to Hawaii's visitors industry.
Challenge JJ		
System approach to planning projects-use multi-objective approach.		
69	Integrating decisions about water resource management with related economic development and community planning decisions (e.g., water w/ag w/emergency	Water is integral to all and @/all affect water.

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ID#	Challenge	Why challenge is important?
	preparedness w/environmental protection).	
70	Watershed – repair and improvement of the system.	Funding.
71	Multi-objective approach to water resources planning.	

APPENDIX B

SUBMITTED PUBLIC STATEMENTS AND MATERIALS

